

Appl. No. 10/761,728  
Response to Office Action of February 16, 2006  
Page 8 of 19

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**Amendments to the Drawings:**

The attached sheet of drawings labels the Figure previously marked as Figure 7 as Figure 7A and Figure 7B (showing the magnification view), as requested by the Examiner.

Attachment: New Sheet

Appl. No. 10/761,728  
Response to Office Action of February 16, 2006  
Page 9 of 19

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**Remarks/Arguments:**

**I. Introduction**

Upon entry of the present amendment, claims 1-11 will be pending in this application. The Examiner has withdrawn claim 12 from examination. Claim 1 has been amended to incorporate the elements of claims 5 and 6, and those claims have been cancelled. Because the present amendment does not raise new issues requiring further consideration or search and does not introduce new matter, entry is appropriate under 37 C.F.R. § 1.116, and is respectfully requested. Based on the following remarks, Applicants respectfully request reconsideration of the Examiner's rejections and allowance of the pending claims.

**II. Drawings**

The Examiner has objected to the corrected drawing filed January 9, 2006 as referring to two views identified as a single Figure. The attached sheet of drawings includes Figure 7, re-labeled as Figures 7A and 7B, which are schematic figures showing the coupling in connection with an airplane seat (7A) and the close-up magnified view (7B), as requested by the Examiner. This sheet is labeled as "New Sheet."

**III. Specification**

The Examiner has objected to the specification as failing to refer to the new figures. Appropriate correction has been made.

The Examiner has also objected to the detailed description as not providing appropriate antecedent basis for the "circular disc" in claim 3 and the elements of claim 8. Although Applicants attempted to address this rejection in their previous response, the

Appl. No. 10/761,728  
Response to Office Action of February 16, 2006  
Page 10 of 19

Examiner appears to have misunderstood the intent of those arguments. The *drawings are a part of the specification* – accordingly, support for claim amendments in the figures means that the specification does provide antecedent basis for the claims.

Nonetheless, in an abundance of cooperation and in the interest in advancing the prosecution of this application, a written description of what is shown in the drawings has been added to the specification. No new matter has been added because, as acknowledged by the Examiner, *the limitations are shown in the drawings as originally filed*.

Other elements shown clearly in the figures, but not necessarily discussed in the specification have also been clarified. Again, no new matter has been added because the originally filed figures show the claimed elements.

#### IV. 35 U.S.C. § 112

The Examiner has rejected claims 1-11 under 35 U.S.C. § 112, first paragraph as failing to comply with the written description requirement. The Examiner's position is that the following claim element (reproduced as currently amended) is not supported by the specification: "means, comprising a plurality of openings for receiving the pins of the other hub assembly while providing clearance therefor, thereby permitting movement of the pins within the openings to accommodate angular misalignment, parallel misalignment, and axial misalignment of the received shafts." Applicants disagree.

Page 6 of the specification describes how force is transmitted through the system and states that "angular misalignment tolerance may be as great as ten degrees. Parallel misalignment may be tolerated as a function of clearance hole sizes, while axial

Appl. No. 10/761,728  
Response to Office Action of February 16, 2006  
Page 11 of 19

misalignment is tolerated as a function of dowel pin length. If parallel misalignment is significant, the dowel pins will move diametrically around the clearance holes of the opposing hub as the coupling rotates.” Page 7 also states that an object of the invention is to “provide couplings adapted to accommodate angular, axial, and parallel shaft misalignments.”

**V. 35 U.S.C. § 102**

**A. Downey**

The Examiner has maintained the rejection of claims 1-6, 8, and 10-11 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 3,798,924 to Downey. The Examiner states that the mechanical connection between the flanges in Downey is affected by the pin connection between the flanges at the center member 40, and that the clearance between the openings 36 and pins 30 has no affect on the mechanical connection. Applicants disagree.

**1. No axial misalignment solution**

While the Downey patent attempts to address the issue of parallel and angular misalignment, it fails to accommodate axial misalignment, as presently claimed. If the two flanges are subjected to excessive amount of torque or if the torsion element fails or is severely damaged, or if any other axial misalignment were to occur in the Downey coupler, the pins could move out of their recessed openings enough that the mechanical connection between the two flanges would be lost. In other words, if the pieces become axial

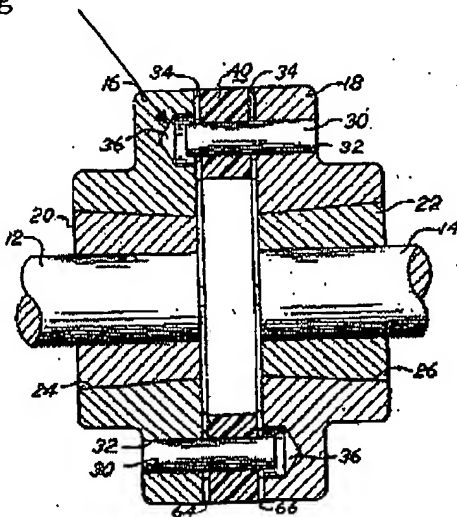
Appl. No. 10/761,728  
Response to Office Action of February 16, 2006  
Page 12 of 19

misaligned, the system would fail. Accordingly, the Downey patent fails to accommodate axial misalignment, as presently claimed.

**2. Pins not of length sufficient to be substantially completely received**

One reason that axial misalignment is not accommodated is because the Downey pins are not of a length that is sufficient to be received substantially completely by a means for receiving the pin. As mentioned, if any axial misalignment were to occur in the Downey coupler, the pins could move out of their recessed openings enough that the mechanical connection between the two flanges would be lost. This is at least partially because the pins are barely received by openings in the corresponding flange as shown in Figure 2, reproduced below.

Downey pins do not extend substantially completely into other hub;  
Look at this large opening



Appl. No. 10/761,728  
Response to Office Action of February 16, 2006  
Page 13 of 19

A slight disengagement of the flanges would cause the system to fail, whereas if the hubs of the presently claimed invention were to disengage, the pins would remain in contact with the other hub, holding the system together.

Thus, at least because the Downey reference does not teach or disclose (1) accommodation of axial misalignment and (2) pins substantially received by the means for receiving the pin, it cannot be found to anticipate each and every element of the pending claims. The Examiner is respectfully requested to reconsider and withdraw the rejection.

**B. Hickman**

The Examiner has also rejected claims 1-11 under 35 U.S.C. § 102(b) as being anticipated by GB Reference No. 582,901 to Hickman. The Examiner states that Hickman shows a hub assembly with an opening for receiving the pin of the other hub assembly and vice versa. Applicants disagree.

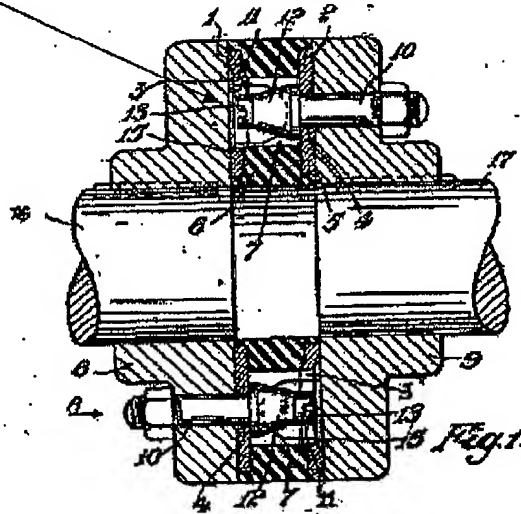
**1. No opening for receiving a pin**

The Hickman reference does not teach hub assemblies that have an opening "for receiving the pin of the other hub assembly," much less a system in which those openings accommodate angular misalignment and axial misalignment of the shafts. First, as shown by Figure 1 of the Hickman reference, the Hickman hub assemblies do not have the claimed openings for receiving the pin of the other assembly.

Appl. No. 10/761,728  
 Response to Office Action of February 16, 2006  
 Page 14 of 19

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Hickman pins do not extend at all into other hub;  
 They lie flush



The coupling bolts 10 (which the Examiner has characterized as the claimed pins) are contained by the cavities 7 of the resilient member 6 (see Hickman Figure 1; col. 4, lines 30), but they are not received by the opposite hub, as Applicants recite.

**2. Pins not of length sufficient to be substantially completely received**

Nor are the pins of a length sufficient to be received substantially completely by a means for receiving the pin. In fact, the Hickman claims clarify that the "heads of the coupling bolts within the cavities of the resilient member are extended *to be substantially flush* with the outer surface of the plates..." In short, heads that are flush with the plate are clearly not received by the plate. See Hickman, claim 1.

**3. No axial misalignment solution**

Because of at least the above reasons, the Hickman device cannot accommodate axial misalignment, as presently claimed. Another reason that the Hickman device cannot handle

Appl. No. 10/761,728  
Response to Office Action of February 16, 2006  
Page 15 of 19

axial misalignment is because the “resilient member is sandwiched between and bonded to two plates.” *See* col. 1. If any axial misalignment were to occur, the bolt heads do not engage with the opposite plate. The resilient member could be destroyed by overloading. Accordingly, because the Hickman device cannot handle angular, parallel, or axial misalignment, nor does it have the claimed pin geometry, Applicant respectfully requests that the rejection be withdrawn.

**C. Weiss**

The Examiner has further maintained the rejection of claims 1-6, 8 and 11 under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 4,708,692 to Weiss. The Examiner states that Weiss shows a first hub assembly having an opening for receiving a pin of the other hub assembly. Applicants disagree.

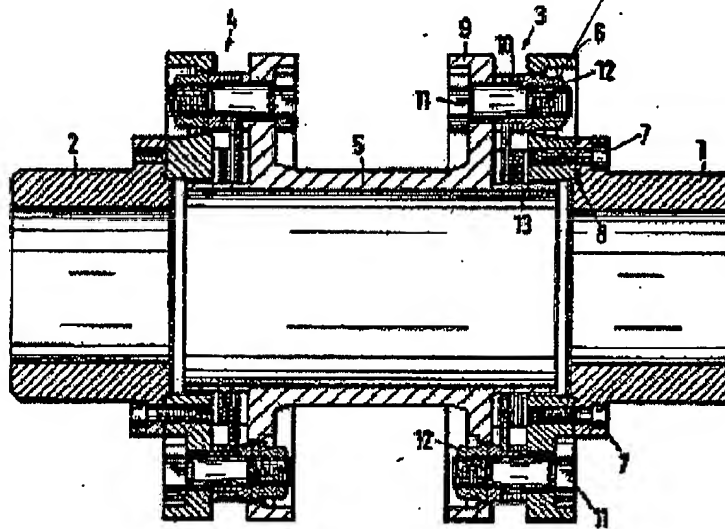
The Weiss patent does not teach hub assemblies that have openings for receiving the pin of the other hub assembly, nor a system in which those openings accommodate angular misalignment and axial misalignment of the shafts. It appears that the Examiner is considering the connecting flanges 6, 9 to correspond to Applicants’ hub assemblies. Applications respectfully point out that bolt 11 is screwed into the other flange, and it can only be screwed in one way. It is not received within an opening that can “accommodate any combination of angular misalignment, parallel misalignment, and axial misalignment,” as Applicants recite. By its nature, a screw/screw thread assembly is intended to hold the screw securely in place and does not accommodate for parallel or angular misalignment (and if it can accommodate axial misalignment, likely only in negligible amounts). Accordingly, there



Appl. No. 10/761,728  
 Response to Office Action of February 16, 2006  
 Page 16 of 19

is no teaching or suggestion of the present claims and withdrawal of the rejections is respectfully requested.

Weiss "pin" 11 is screwed into the flanges (which Examiner is referring to as hubs) So the system cannot accommodate claimed misalignments

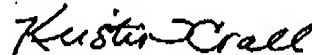


Appl. No. 10/761,728  
Response to Office Action of February 16, 2006  
Page 17 of 19

### CONCLUSION

For at least the above reasons, Applicants respectfully request allowance of claims 1-11 and issuance of a patent containing these claims in due course. If there remain any additional issues to be addressed, the Examiner is invited to contact the undersigned attorney at 404.815.6147.

Respectfully submitted,



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